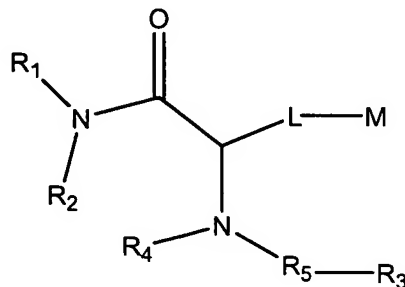


## HISTONE DEACETYLASE INHIBITORS

## ABSTRACT

[00294] Histone deacetylase inhibitors and uses thereof are provided that have the general formula



wherein

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are each independently selected from the group consisting of hydrogen, a substituted or unsubstituted straight chained C<sub>1-12</sub> alkyl, C<sub>2-12</sub> aminoalkyl or C<sub>2-12</sub> oxaalkyl, and a substituted and unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, with the proviso that R<sub>3</sub> and R<sub>4</sub> are not both hydrogen;

R<sub>5</sub> is selected from the group consisting of a carbonyl, a substituted or unsubstituted C<sub>1-3</sub> alkyl, a substituted or unsubstituted -C<sub>1-3</sub> alkyl-C(O), a substituted or unsubstituted -C(O)-C<sub>1-3</sub> alkyl, and a substituted or unsubstituted -C(O)C(O)C<sub>1-3</sub> alkyl;

M is a substituent capable of complexing with a protein metal ion; and

L is a substituent comprising a chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.